



<http://www.ijmp.jor.br>
ISSN: 2236-269X
DOI: 10.14807/ijmp.v11i2.963

v. 11, n. 2, March-April 2020

THE EFFECT OF MARKETING MIX AND BRAND IMAGE ON CUSTOMER LOYALTY OF REMIXED MORTAR

Megawati Simanjuntak

*Department of Family and Consumer Sciences,
Faculty of Human Ecology, IPB University, Indonesia
E-mail: mega_juntak@apps.ipb.ac.id*

Ujang Sumarwan

*Department of Family and Consumer Sciences,
Faculty of Human Ecology, IPB University, Indonesia
Email : usumarwan@gmail.com*

Ariel Diesto Situmorang

*School of Business, IPB University, Indonesia
Email : ariel@situmorang.web.id*

Submission: 1/15/2019

Accept: 9/19/2019

ABSTRACT

The study aimed to analyze the effect of the marketing mix (product, price, location, promotion, service, human resources, and physical evidence) and brand image of premixed mortar customer loyalty. A total of 100 questionnaire surveys have been distributed to customers in greater Jakarta area who became a decision-maker in a high rise building project. Based on the analysis of the effect of the marketing mix and brand image on premixed mortar loyalty, it can be concluded that product, price, process, and brand image significantly affects loyalty. The variable that has the most significant effect is the price, followed by the product, process and brand image.

Keywords: brand image; customer loyalty; marketing mix; premixed mortar



[<https://creativecommons.org/licenses/by-nc-sa/4.0/legalcode>]
Licensed under a Creative Commons Attribution 4.0 United States License

1. INTRODUCTION

Services construction is one of the strategic sectors to support national development. According to Dipohusodo (1996), a construction project is a project on building infrastructure, which generally covered the work of civil engineering and architecture. Services according to Kotler (2011), are every action offered by one party to another party, which is intangible and does not result in ownership of something.

An increase in the services sector construction is also affecting demand goods consumed at the project, namely the cement industry. Cement is one of the commodities that encourages the development of construction services: the development, especially construction, in proportion to the needs of cement that consumed every year. The data compiled by Indonesia Cement Association proved that the national cement consumption is increasing every year, the latest data show there was a rise in cement consumption in 2016 of 1 million tons, resulted in a total of 62 million tons on cement consumption.

The growth of cement production also affects the increase in premixed mortar production. The prospect of the premixed mortar cement industry has increased significantly over the years. In 2011 record, premixed mortar there is only ten companies that produced premixed mortar; however, in 2016, there are 104 companies produce the premixed mortar. This indicates that business in the field of industrial materials building is exciting and promising. The data obtained from factory production capacity per year shows only five companies that could be classified as a large scale (>250,000 tons/year) and the rest are local players.

The number of newcomers proved how this industry is very interesting to develop. These new companies generally rely on prices that are relatively cheaper than big players but override the quality of products and services. Consumers who have a good impression on a product will make the product into consideration for the next project. With this approach, companies apply mix marketing to obtain a distinct impression and responses from the customers as part of the company strategy to improve company performance. Mix marketing applied seven variables (7P), including covering, product, price, place, promotion, process, people, and physical evidence (BOOMS; BITNER, 1981). Rahman et al., (2019) found that marketing mix significantly and positively influenced on loyalty.

The company also has to observe the brand image that flourished in the market. Consumer positive attitudes toward the brand will affect consumer's loyalty (SUMARWAN,

2014). Simanjuntak et al., (2019) also found that emotion as attitude also influence on the repurchase intention. So the brand image is a variable that essential to provide a view for the company. The 7P marketing mix strategy and brand image that is carried out are expected to provide outcomes as input for the company in the future.

Based on the problem mentioned above, this study aimed to analyze the effect of the marketing mix (product, price, location, promotion, service, human resources, and physical evidence) and brand image of premixed mortar customer loyalty. The paper consists of the following section: literature review, research methodology, result and discussion and conclusion.

2. LITERATURE REVIEW

2.1. Premixed Mortar

Cement is an adhesive used in building materials such as stone, adobe, red bricks, or light brick. Cement will become adhesive when mixed with water. Along with the time, technology enables consumers to be more practical, consistent and maintain homogeneity products, thus resulted in a product called premixed mortar (instant cement). Premixed mortar is cement ready-made whose component in the form of are generally cement, sand, filler, and various kinds of additive that adapted to its function. Mortar is part of structural building elements and has functions in making foundations or walls (KURNIADI; HERUMANTA, 2016).

The advantages of using premixed mortar (ARIF; ABDILLAH, 2011) are consistency, convenience, quality, material efficiency, and energy efficiency. Premixed mortar has a standard condensed, which is useful in determining mortar strength according to its function and usefulness, so it is expected that the mortar that withstands the compressive forces due to the load working on it is not destroyed (MULYONO, 2003). An excellent premixed mortar according to Tjokrodimuljo (1996) should have a cheap, durable, easy to apply (stirred, lifted, fitted and flattened), adheres well with bricks/stone or other media, quick-dry and hardened, resistant to water seepage, and no cracks arise after installation.

2.2. Marketing Mix

According to Sumarwan et al. (2009), there are three levels of marketing mix interaction, i.e., consistency is a logical fit between two or more elements of the marketing mix, integration is a harmonious relationship to each marketing mix variables, and last is leverage is a right and related approach to support any marketing mix variables. According to Kotler

(2011), the marketing mix is a systematically developed strategy through tactical marketing, pricing, place, and promotion (4P). Products, prices, places, and promotions are the factors that cause the business to succeed or fail (NUSEIR; MADANAT, 2015). The company integrates these four variables to produce the desired response in a targeted market.

However, today 4P is evolving into 7P to respond to the nature of the service to the consumer. The concept of 7P's in the marketing mix required to plan viable strategies in order to fulfill the customer need profitably in a stiff marketplace (LOVELOCK, 2011). Each variable will interact with each other so that mutual support and sustainability can be achieved. Lovelock and Wright (2007) say that in the service process, three additional elements of 4P development are considered to have a role, i.e., the process is a method of operation or a series of specific actions required in a sequence that has been applied. Second is the person (human resources), i.e., the employees involved in the interaction. Third is physical evidence of visual cues that provide evidence of the quality that the service provided.

2.3. Customer Loyalty

Subagyo (2010) argues that consumer loyalty is the purchase of a brand consistently by customers. Sumarwan (2014) states that brand loyalty is defined as a consumer's positive attitude towards a brand; consumers have a strong desire to buy the same brand in the present and future. Real loyalty cannot be formed if the customer does not or has not made the purchase process first. Brand loyalty will lead to the emergence of brand commitment, namely the emotional and psychological closeness of a consumer to a product (SUMARWAN, 2014). One way to sustain consumers is to maintain good relationships with consumers, as customers with long-term loyalty will not easily switch to other brands, while customers with short-term loyalty defect more quickly when faced with a better alternative (LIU et al., 2011).

Therefore, companies are competing to retain existing customers, and even to entertain consumers so as not to move to other products. The theory by Griffin (2005) explained that there are four loyal customer variables include:

- a) Make a purchase regularly
- b) Buying between product lines or services
- c) Not affected by the competition of other similar products
- d) Recommend to others

2.4. Product



Product by Kotler (2011) is everything that can be offered to the market to get attention, bought, used, or consumed that can satisfy the wants or needs. Conceptually the product is a personal understanding of the producer of something that can be offered as an attempt to achieve organizational goals through the fulfillment of consumer needs and activities, under the competence and capacity of the organization and the purchasing power of the market.

- H1: The product has a significant effect on loyalty.

2.5. Price

The definition of the price according to Kotler (2011), is the amount of money charged to a product or service. More broadly, the price is the total value that consumers exchange for a profit from ownership of a product or service. The price according to Sumarwan (2014), is an amount of money that is worth spending on many goods or services. Arokiasamy (2012) suspect that the marketing mix and consumer perceptions influence the variable forming of consumer loyalty.

- H2: Price has a significant effect on loyalty.

2.6. Place

Kotler (2011) stated that the non-strategic location of the consumer allows the possibility of a smaller interest in the products offered. Location is a consumer that decides to make transactions and buy something they want. Utomo and Nurmalina (2011), concluded customer satisfaction and loyalty to be formed from service quality.

- H3: Location has a significant effect on loyalty.

2.7. Promotion

Promotion can be interpreted as communication because, through effective communication, there is a beneficial interaction (KOTLER, 2011). Promotions by companies vary according to company strategy.

H4: Promotion has a significant effect on loyalty.

2.8. Process

A service is a set of methods or operating procedures that require measurements and steps to be taken jointly at work. Kotler (2011) says the process/service is a set of methods or operating procedures that require measurements and stages to be done jointly at work. The process of one of the activities is done by providing services to someone.

- H5: Process has a significant effect on loyalty.

2.9. People

Ahmady (2012) said that the relationship between seller and buyer is not based only on the transactional aspect but also on the social aspect that helps the interaction happened. This aspect will lead to another goal, which is a convenience between two sides. Nasuka (2016) study revealed that there is a significant indirect relationship between salespeople and consumer loyalty, mediating by consumer satisfaction. This means that that sales attitude has a positive and significant relation to customer satisfaction.

- H6: People vea significant effect on loyalty.

2.10. Physical Evidence

Booms and Bitner (1981) said that physical evidence as a visual sign or physical aspects that affect the quality of service. The appearance of the company's physical facilities, infrastructure, and the circumstances of the surrounding environment are clear evidence of the services provided by the service provider. Physical evidence may include physical facilities (buildings, warehouses, and so on), equipment and equipment used (technology), and the appearance of employees. Zeithalm et al. (2006) state that physical evidence communicates to consumers where and how service organizations play a role in creating service experience in satisfying consumers and in enhancing consumer perceptions about service quality.

- H7: Physical evidence has a significant effect on loyalty.

2.11. Brand Image

Imagery cannot be described physically because it is only in the minds of society/perception. Kotler and Armstrong (2001) argue that brand image is a set of consumer beliefs about a particular brand. An image is a company asset because it has an impact on consumer perception. When consumers believe in a specific brand, it will cause a perception of the product's brand. Schiffman and Kanuk (2007) define perception as an individual process for selecting, processing, and interpreting the stimulus into a particular picture. Therefore, perception is the view of a person seeing the reality that occurs around him.

- H8: Brand image has a significant effect on loyalty.

3. RESEARCH METHODOLOGY

3.1. Data

The research activities were conducted in Jabodetabek. Data collection was conducted by a direct survey to the respondents who have used the product of premixed mortar as 100 respondents. The selection in the Jabodetabek area as a place of research is based on the highest growth rate of development compared to other big cities.

3.2. Variables

Exogenous latent variables in this study were the product (X1), price (X2), place (X3), promotion (X4), process (X5), people (X6), physical evidence (X7), brand image (X8), the endogenous latent variable was loyalty (Y1). Measurement scale used is a Likert scale with 5 (five) points, one state strongly disagrees, and five states strongly agree.

Table 1: Likert scale score

No	Answer	Score
1	Strongly agree	5
2	Agree	4
3	Neutral	3
4	Disagree	2
5	Strongly disagree	1

The research conducted using the 7P marketing mix and brand image as an exogenous variable. The eight exogenous and one endogenous variable are:

1. Products (X1). This variable has seven indicators, namely:

(X1.1): famous products

(X1.2): diverse products

(X1.3): the product is easy to apply

(X1.4): the resulting product is qualified

(X1.5): consistency of quality between each product

(X1.6): the product is environmentally resistant

(X1.7): the product is well packed

2. Price (X2). This variable has three indicators, namely:

(X2.1): price according to product quality

(X2.2): price competes with other brands

(X2.3): acceptable terms of payment

3. Place (X3). This variable has three indicators, namely:

(X3.1): large production capacity

(X3.2): factory location close to the center of development

(X3.3): ease of delivery if the product needs undertones

4. Promotion (X4). This variable has five indicators, namely:

(X4.1): the product catalog is informative and easy to understand

(X4.2): interesting product samples

(X4.3): testimony from the previous project

(X4.4): conducting periodic field supervision

(X4.5): hold periodic gatherings

5. Process (X5). This variable has six indicators, namely:

(X5.1): customer service procession responded quickly

(X5.2): the training service procession responded well

(X5.3): the mock-up service procession responded well

(X5.4): the supervision service procession responded well

(X5.5): a fast procession from the stage of order to delivery of product material

(X5.6): delivery of product materials on time

6. People (X6). This variable has six indicators, namely:

(X6.1): friendly sales team attitude towards consumers

(X6.2): a well-dressed and standard-looking sales team

(X6.3): follow-up by the sales team regularly

(X6.4): a trustworthy sales team

(X6.5): team sales can be contacted at any time

(X6.6): the explanation of the technician team is easy to understand

7. Physical evidence (X7). This variable has four indicators, namely:

(X7.1): delivery of products under operational standards

(X7.2): there is a project support letter

(X7.3): there are technical data in each product variation

(X7.4): the driver is willing to wait for the loading queue

8. Brand Image (X8). This variable has three indicators, namely:

(X8.1): the brand is easy to remember

(X8.2): the brand is familiar

(X8.3): the brand has a distinctive feature in each product

9. Loyalty (Y1). This variable has four indicators, namely:

(Y1.1): make purchases regularly

(Y1.2): buy the inter-product line from offered

(Y1.3): not affected by the competition of other similar products

(Y1.4): recommending the brand to others

3.3. Structural Equation Modeling

The tool used in the research is a questionnaire, a set of computers, software SmartPLS 2.0. Data are processed by using PLS (Partial Least Square), PLS is one of the alternative method of SEM (Structural Equation Modeling) which can be used to overcome problems in the relationship. The purpose of the PLS is to predict the effect of variable X on Y and explain the theoretical relationships between the two variables (TALBOT, 1997).

PLS has the assumption of free research data distribution, meaning that the research data does not refer to one particular distribution (GHOZALI, 2008). PLS is an alternative method with a variance-based or component-oriented approach to model prediction, whereas covariance-based SEM methods are oriented toward modeling analysis and require a robust theoretical basis of a relationship model.

4. RESULT AND DISCUSSION

4.1. Outer model evaluation

Evaluation of the measurement model is performed on each latent variable by testing the validity and reliability of the construct. The size of a valid indicator if it has a loading factor (λ) with latent variables to be measured > 0.50 (IGBARIA et al., 1997) and has a value of t-value > 1.96 . According to Hartono (2008), if the value of the t-value is higher than t-table, then the hypothesis is accepted (t-value > 1.96), which means the influence of variables on the dependent variable is significant. Based on the loading factor and t-value obtained and can be seen in Table 2.

Table 2: Validity test of the premixed mortar measurement model

Relation	Loading Factor	T-Value
X1.1 → Product X1	0.538	3.149*
X1.2 → Product X1	0.848	26.966*
X1.3 → Product X1	0.644	6.272*
X1.4 → Product X1	0.885	43.898*
X1.5 → Product X1	0.830	19.882*
X1.6 → Product X1	0.830	20.199*
X1.7 → Product X1	0.862	36.484*
X2.1 → Price X2	0.928	64.247*
X2.2 → Price X2	0.860	38.191*
X2.3 → Price X2	0.884	25.761*
X3.1 → Price X3	0.977	7.095*
X3.2 → Price X3	0.936	7.715*
X3.3 → Price X3	0.965	6.939*
X4.1 → Promotion X4	0.876	4.383*
X4.2 → Promotion X4	0.919	5.47*
X4.3 → Promotion X4	0.887	4.633*
X4.4 → Promotion X4	0.722	3.669*
X4.5 → Promotion X4	0.893	4.634*
X5.1 → Process X5	0.832	32.805*
X5.2 → Process X5	0.820	29.444*
X5.3 → Process X5	0.851	27.11*
X5.4 → Process X5	0.811	17.801*
X5.5 → Process X5	0.841	24.597*
X5.6 → Process X5	0.815	18.232*
X6.1 → People X6	0.850	3.595*
X6.2 → People X6	0.772	3.139*
X6.3 → People X6	0.791	3.007*
X6.4 → People X6	0.616	2.072*
X6.5 → People X6	0.889	3.526*
X6.6 → People X6	0.920	3.877*
X7.1 → Physical Evidence X7	0.844	3.825*
X7.2 → Physical Evidence X7	0.902	3.345*
X7.3 → Physical Evidence X7	0.976	3.402*
X7.4 → Physical Evidence X7	0.878	3.599*
X8.1 → Brand Image X8	0.591	2.031*
X8.2 → Brand Image X8	0.763	8.077*
X8.3 → Brand Image X8	0.908	31.881*

Relation	Loading Factor	T-Value
Y1.1 → Loyalty Y1	0.717	14.137*
Y1.2 → Loyalty Y1	0.905	34.352*
Y1.3 → Loyalty Y1	0.869	35.602*
Y1.4 → Loyalty Y1	0.900	48.410*

Note: loading factor score > 0.5; T-Value > 1.96 = valid

Based on the results of the loading factor and t-value obtained and can be seen in the table above, it can be concluded that all loading factor from the relationship of indicator variable with latent variable has loading factor > 0.5 and has a value of t-value > 1.96. This indicates that all the indicator variables are valid to measure the latent construct.

The results of SEM measurement analysis indicate that for the product, the highest indicator of contribution is X1.4, which is 0.885 of loading factor and t-value 43.898. Whereas for the price, the highest contribution is X3.1, namely 0.977 of loading factor with a t-value of 7.095. On promotion, the highest contribution is X4.2 which is 0.919 of loading factor with t-value 5.47. In the process, the highest contribution is X5.3 which is 0.851 of loading factor with t-value 27.11. The highest contribution to people is X6.6, which is 0.920 of the loading factor with a t-value of 3.877. At the most substantial evidence, the physical contribution is X7.3 namely 0.976 of loading factor with t-value 3.402. In the highest brand image, the contribution is X4.2, which is 0.908 of the loading factor with a t-value 31.881. Finally, the highest contribution to loyalty is Y1.2, which is 0.905 of the loading factor with t-value 34.352. The indicators with the highest factor loading values indicate the highest causality relationship from the indicator to the construct.

Another method that can be used to measure the validity of a construct is to look at the value of AVE in each latent variable. The AVE value for each latent variable has a value > 0.5 is highly recommended. Based on Table 3, the AVE value of the product, price, location, promotion, process, people, physical evidence, brand image, and loyalty indicate that more than 0.5 indicates that each variable is a valid indicator to measure its latent construct.

Furthermore, a variable is said to be quite consistent if the variable has a value of composite reliability > 0.7. Table 3 shows that all values of composite reliability > 0.7; therefore it can be concluded that the indicators used in this study have good reliability or able to measure the construct. The evaluation of the measurement model shows that the overall model fit with the data so that the results of this study can be declared valid and reliable.

Table 3: Score of AVE, Composite Reliability and r square of laten variable

Laten Variables	AVE	Composite Reliability	R Square
Product	0.618	0.917	-

Price	0.794	0.920	-
Place	0.92	0.972	-
Promotion	0.744	0.935	-
Process	0.686	0.929	-
People	0.66	0.920	-
Physical evidence	0.812	0.945	-
Brand image	0.585	0.804	-
Loyalty	0.725	0.913	0.836

4.2. Indicator Contribution toward Variables

4.2.1. Indicator Contribution toward Product

The loading factor value means the contribution of the indicator to the variable. The indicator which has the least value is well-known product indicator with a 0.538 loading factor, indicating that this indicator provides the least relative contribution rate to product variables (Table 4). Quality product indicator with loading factor 0.885 is the most contributing indicators of the product. Consumers prioritize the quality of products produced and see goods based on the quality offered.

Table 4: Indicator contribution to product variable

Indicators	Loading Factor	t-value
Famous	0.538	3.149*
Diverse	0.848	26.966*
Easy application	0.644	6.272*
Quality	0.885	43.898*
Consistent	0.830	19.882*
Resistent	0.830	20.199*
Well packed	0.862	36.484*

Note: loading factor > 0.5 = valid, t-value > 1.96 = significant

4.2.2. Indicator Contribution toward Price

Based on the result of the study note that the price indicator, according to quality, competitive prices, and acceptable payment process, is an indicator that contributes significantly to the price variable (Table 5). The indicator that has the least value is price competing with a 0.860 loading factor, indicating that the indicator provides the least relative contribution rate to the price variable. The price indicator corresponds to the product quality with the loading factor value of 0.928 is the greatest contribution. This indicates that the quality of the product is proportional to the price offered. Consumers will continue to use the product when the price offered matches the quality provided.

Table 5: Indicator contribution to price variable

Indicators	Loading Factor	t-value
According to quality	0.928	64.247*
Compete	0.860	38.191*
Payment	0.884	25.761*

Note: loading factor > 0.5 = valid, t-value > 1.96 = significant

4.2.3. Indicator Contribution toward Place

The results of the PLS calculation indicate that the indicator of production capacity, the location of the plant near the center of development, as well as the ease of delivery if the need for undertonase is an indicator that contributes to the location variable (Table 6). The indicator which has the least value is the factory indicator near the development center, with the loading factor 0.936. The indicator of production capacity at the factory with the loading factor value of 0.977 is the most contributing indicator. The higher the production capacity, the more products are produced, so the product can be ready to send without waiting for the production queue. With large production, companies can issue guarantees to projects with extensive needs.

Table 6: Indicator contribution to place variable

Indicators	Loading Factor	t-value
Production capacity	0.977	7.095*
Factory near the center	0.936	7.715*
Undertonase	0.965	6.939*

Note: *loading factor* > 0.5 = valid, *t-value* > 1.96 = significant

4.2.4. Indicator Contribution toward Promotion

Based on the results of PLS show an informative product catalog, interesting product samples, there is testimony / reference from the previous project, the procurement of periodic supervision, and held a periodic gathering is an indicator that contributes to the promotional variable (Table 7). The indicator which has the least value is an informative product catalog indicator with a loading factor of 0.876. The promotional variable is represented by product samples that contribute the most with a loading factor value of 0.919. It is known that the samples of the products provided are interesting and informative. Especially in one sample consists of many products displayed, making it easier for consumers to see and assess the products listed. Great product samples can also convince consumers to use the product.

Table 7: Indicator contribution to promotion variable

Indicators	Loading Factor	t-value
Catalog	0.876	4.383*
Product sample	0.919	5.470*
Project testimony	0.887	4.633*
Periodic supervision	0.722	3.669*
Gathering	0.893	4.634*

Note: *loading factor* > 0.5 = valid, *t-value* > 1.96 = significant

4.2.5. Indicator Contribution toward Process

Based on the results of the calculation of the PLS shows customer service, training, mock-up, supervision, the fast procession from the stage of order to the delivery of product materials, and delivery of materials on time products are indicators that contribute to service variable (Table 8). The indicator which has the least value is the indicator of supervision service with the loading factor of 0.811. The mock-up process, with the loading factor value of 0.851, becomes the most influential indicator. A mock-up is a function of providing an example of how the application and see the results of the products that have been installed in the project, usually combined with other products. This is seen from the better mock up service provided by the company, the higher the loyalty generated by consumers.

Table 8: Indicator contribution to a process variable

Indicators	Loading Factor	t-value
Customer Service	0.832	32.805*
Training	0.820	29.444*
Mock up	0.851	27.110*
Supervision	0.811	17.801*
Fast order	0.841	24.597*
Material delivery	0.815	18.232*

Note: *loading factor* > 0.5 = valid, *t-value* > 1.96 = significant

4.2.6. Indicator Contribution toward People

Based on the results of the calculation of the PLS shows a friendly sales attitude, sales look neat, follow up by the sales team regularly, the sales team can be trusted, the sales team can be contacted at any time, and explanation technician team is easy to understand are indicators that contribute to people variables (Table 9). The indicator which has the least value is a reliable sales indicator with a loading factor of 0.616. An explanation by a technician with a value of 0.920 loading factor becomes the most influential. This happens because the project requires information not only technical data products but also requires field data. Explanation of the technician to strengthen the written data. At the time of mock-up activities, a technician team doing the explanation of the start application, constraints, and the strength of the product. Technician explanation can also influence purchasing decisions because it can affect consumers in selecting products.

Table 9: Indicator contribution to people variable

Indicators	Loading Factor	t-value
Friendly sales	0.850	3.595*
Neat sales	0.772	3.139*
Follow up periodic	0.791	3.007*
Sales can be trusted	0.616	2.072*
Sales are easy to contact	0.889	3.526*
Technician explanation	0.920	3.877*

Note: *loading factor* > 0.5 = valid, t-value > 1.96 = significant

4.2.7. Indicator Contribution toward Physical Evidence

PLS shows the delivery of products in accordance with operational standards, there is a letter supporting the project, there is technical data in each product, and the driver is willing to wait for the loading queue are an indicator that contributes to the physical evidence variable (Table 10). The indicator which has the smallest value is the product delivery indicator in accordance with the operational standard with the loading factor value of 0.844. The availability of technical product data with the loading factor value of 0.976 is the indicator that most contribute to the physical. Physical evidence on products that to have technical data means that the consumer realizes that a good product is a product that has complete data either in the specification, method of application, or chemical data product.

Table 10: Indicator contribution to physical evidence variable

Indicators	Loading Factor	t-value
Delivery product	0.844	3.825*
Supporting letter	0.902	3.345*
Technical data	0.976	3.402*
Queue of loading	0.878	3.599*

Note: *loading factor* > 0.5 = valid, t-value > 1.96 = significant

4.2.8. Indicator Contribution toward Brand Image

Based on the results of PLS calculations show the brand is easy to remember, familiar brand and brand have characteristics that are indicators that contribute to brand image variable (Table 11). The indicator which has the least value is the brand indicator is easy to remember with the loading factor value of 0.591. The brand indicator characterizes each product as the indicator that most contributes to the brand image with the loading factor of 0.908. This is because product characteristics that other brands do not have can be a product advantage to increase consumer loyalty. Easy to stick to the basic media and long dry when the application is a part of the product which has characteristics.

Table 11: Indicator contribution to brand image variable

Indicators	Loading Factor	t-value
Easy to remember	0.591	2.031*
Known brand	0.763	8.077*
Have characteristics	0.908	31.881*

Note: loading factor > 0.5 = valid, t-value > 1.96 = significant

4.2.9. Indicator Contribution toward Loyalty

Based on the results of PLS calculations showing regular purchases, purchasing each product variant, not being affected by other similar product variants, and recommending products to others are indicators that contribute to loyalty variables (Table 12). The indicator which has the least value is a regular purchase indicator with a loading factor value of 0.717. The purchasing indicator for each product line with a loading factor of 0.905 is the most contributing to loyalty. This is because consumers who buy each product indicate greater loyalty level. For example, any use of the work area of wall or floor system, it has several products that can facilitate these areas, buying each product line means that consumers buy all the products that are part of the area.

Table 12: Indicator contribution to loyalty variable

Indicators	Loading Factor	t-value
Regular purchases	0.717	14.137*
Buy each product line	0.905	34.352*
Not affected by similar products	0.869	35.602*
Recommend products	0.900	48.410*

Note: loading factor > 0.5 = valid, t-value > 1.96 = significant

4.3. Inner model evaluation

The structural model can be evaluated by looking at the R-square value of endogenous latent variables. Table 13 shows that the R-square value of loyalty variable is 0.836, meaning that the loyalty can be explained by product, price, place, promotion, process, people, physical evidence, and brand image of 83.6%, the remaining 16.4% is other variables outside the model. If the Goodness of Fit value > 0.36, then the model validation is good (COHEN, 1988). A value of 0.78 over 0.36 indicates that model validation is good.

Table 13: Goodness of Fit score

Variables	Communality	R-Square
Product	0.618	-
Price	0.794	-
Place	0.92	-
Promotion	0.744	-
Process	0.686	-
People	0.66	-
Physical Evidence	0.812	-
Brand Image	0.585	-
Loyalty	0.725	0.836

$$GoF Brand A = \sqrt{0.727 \times 0.836} = 0.78$$

4.4. Hypothesis Test

The most influential variable to loyalty is the price with the coefficient loading factor of 0.431 and the t-value of 3.608 (Table 14). Then followed by a product with a loading factor of 0.279 and t-value of 2.596, then process with loading factor of 0.181 and t-value of 2.013, then brand image with a large 0.146 and t-value of 2.067. This becomes one of the notes that project work requires support from suppliers not only products but also services provided after the goods are delivered. In the structural equation model of premixed mortar, physical evidence, promotion, human resources, and location do not affect premixed mortar loyalty as seen from the t-value value of < 1.96 each.

Table 14: Results of hypothesis

Relationship	Beta Coef	T-value	Conclusion
Product → Loyalty	0.279	2.596	Accept H1
Price → Loyalty	0.431	3.608	Accept H2
Place → Loyalty	0.072	1.631	Reject H3
Promotion → Loyalty	-0.023	0.571	Reject H4
Process → Loyalty	0.181	2.013	Accept H5
People → Loyalty	-0.001	0.015	Reject H6
Physical Evidence → Loyalty	0.028	0.698	Reject H7
Brand Image → Loyalty	0.146	2.067	Accept H8

Note: T-value > 1.96 is significant

4.4.1. The Relationships between Product and Loyalty

From the data obtained shows that product variables between the two brands have significant results. This means that product variables have a significant effect on consumer loyalty. This result is in accordance with the research of Nuseir and Madanat (2015) which states that the product affects loyalty. Product variables (4.53) have a high value. This is based on good products being the main choice in supporting the sustainability of the project. It prioritizes well-known products, products that are diverse, easy to apply, consistent quality, and packaging. From the results obtained, the higher the value of the product will increase loyalty. For product-oriented consumers, the better the use of these products, the higher the intensity of purchases on the products offered.

4.4.2. The Relationships between Price and Loyalty

Based on the results of the analysis, the relationship between price and loyalty variables on both brands has significant value. This is based on not only the product which is the reason consumers choose and use the brand but also the price. The value of the price loading factor is

the highest compared to other variables. These results interpret the price variable to be the most important in instant cement consumer loyalty.

This result is comparable with the research conducted by Arokiasamy (2012), namely of the five variables tested in the marketing mix and consumer perceptions of brand loyalty, there are four variables that show significant results, one of which is price. The price is the variable that has the most significant effect on loyalty. The price variable is built by competitive prices and payment terms that can be received. The price corresponds to quality becomes an advantage.

The more the price is in accordance with the product offered, the higher the purchase and use of the product. Selang (2013), in his research also stated partially that product variables and prices have a significant effect on consumer loyalty. Therefore, it is closely related between product variables and prices given.

4.4.3. The Relationships between Location and Loyalty

The results of the study showed that the relationship between location variables and loyalty in both brands did not have a significant value. Large production capacity, close to development, and products easily sent if the undertonase does not affect consumer loyalty. This is not in line with the research conducted by Utomo and Nurmalina (2011), which states that one of the factors that influence consumer loyalty is the ease of reaching the location (outlet). This difference can be seen from the location, namely where the transaction is at the outlet, while this research is located on a project where consumers are not too influenced by the location of the factory and do not need to go to the store to transact.

4.4.4. The Relationships between Promotion and Loyalty

Promotion variables become one of the variables that are not significant. Informative catalogs, interesting samples, testimonials from previous projects, periodic supervision and gathering do not affect consumer loyalty. This result is not comparable to what has been done by Pourdehghan (2015), in his research that one of the positive effects on loyalty is promotional activities. This is based on the products sold to the project prioritizing the product, price and reference aspects of the previous project. So it is infrequent that there is a product promotion for activities on the project. Therefore, the promotion variable does not affect the consumer loyalty of instant cement.

4.4.5. *The Relationships between Service and Loyalty*

The results of the research show that the relationship between service and loyalty has significant results. The response was given by customer service, response during training, mock-up, supervision, a fast procession from order to delivery, and material coming on time influencing consumer loyalty. This result is consistent with the research conducted by Ivanauskienė and Volungėnaitė (2014) which states that service variables have a positive impact on consumer loyalty. This can be seen from the needs of a project. Activities in the field are not only about products, but also services or services provided. The needs of the project are different from the needs of end-users in general. In one project, it takes a relatively long time to complete.

Therefore, services must always be prepared to support the project development process. This indicates that the project activities are not only about the product but also the service activities provided become one of the loyalty points that occur. Projects that are done have a relatively long time with more than one until two years of processing time. If there is no good service to consumers, the product can have a negative impact on consumer loyalty for instant cement.

4.4.6. *The Relationship between Human Resource and Loyalty*

Research shows that the human resource variable does not have a significant value on loyalty in both brands. The hospitality of the sales, tidiness, periodic follow-up, trust in sales, easy contact, and an easy-to-understand explanation of the technician team turned out to have no effect on customer loyalty.

Project work is slightly different from store transactions, if the human resource variable store becomes one of the influential ones, according to research conducted by Ferrinawati and Pantja (2004) as well as Arthur et al., (2019) about consumer loyalty in the perspective of human resources, it turns out that the results obtained are reliable seller roles can affect loyalty through satisfaction and consumer confidence that results from employee performance. Loyalty can be created if the consumer is satisfied with a product.

4.4.7. *The Relationship between Physical Evidence and Loyalty*

The results obtained are that the physical evidence variable is not significant, meaning that it does not significantly affect loyalty. Basically the business carried out on this project is not too concerned with physical evidence. This situation occurs because this work is done by the way the product is sent to the project, and the consumer needs to use it. Product shipments

according to standard with good pallet, letter of support, technical data, and a driver willing to wait for the loading queue is not the reason for consumers to be loyal to the product.

This is not in line with the research conducted by Tjan (2015), which states that one physical evidence variable from 7P has a significant impact on customer loyalty. The difference was clarified due to differences in the target market, where he researched a shopping center and the opposite of the project.

4.4.8. Relationship between Brand Image and Loyalty

Brand image is the last variable that has significant results on both brands. Products are easy to remember, familiar, and have characteristics that affect consumer loyalty. This result is in line with the research conducted by Anwar et al. (2011) which states that brand image and brand trust have a positive impact on brand loyalty. Consumer actions towards a brand are determined by the brand's image. It is not easy to form a brand image, but if it is formed it will be difficult to change it back.

The image that is formed must be clear and robust and have an advantage compared to its competitors. The stronger the brand image, the higher the possibility of loyalty to the product. The brand applies not only the function but also emotional bonds. It carries out a customer insight strategy wherein sellers and buyers not only educate good products but also add emotional bonds that are channeled to consumers.

4.5. Managerial implication

Based on the results of the research note that the price becomes a very influential variable in the loyalty of premixed mortar, followed by product, brand image, and service. As for the project work, the price becomes the most important thing to progress in the negotiation phase of the tender. The more a manufacturer supports the price, then the consumer's chances of using the more significant product will be followed by loyalty to the product. Product is not less important if the price is competitive but not followed by a good product, then it is in vain (Table 15).

Table 15: Managerial implications

No	Analysis Results	Managerial Implications
1	Price	Price: always critical in responding to the consumer. Open in the price negotiation process and share information about project needs and scale. Segmentation: loyal customers with big purchases get special prices Target: consumers with large project needs, get more intense service Positioning: retaining a good name and good relationship to consumers, whether the project is running or not.

No	Analysis Results	Managerial Implications
2	Product	Manufacturers maintain consistent product quality, reduce consumer complaints on projects by minimizing product problems, production defects, packaging defects, or application errors.
3	Brand Image	Manufacturers keep the company's good name and maintain good relationships with consumers. Holding a gathering, presentation of a new product, and refreshment of the product into an agenda that must be done manufacturer. Holding an event marketing becomes one part in strengthening producer ties with consumers.
4	Process	Serving consumers and responding quickly in response to consumer desires into customer satisfaction. Be available at any time if needed.

The brand image becomes another influential variable because project work often mirrors the previous projects. The better brand is when workmanship, undamaged, and the services provided are good, the more loyal consumers are towards the brand, and will be considered when the consumer is working on the next project. The service variable becomes one of the indicators that affect loyalty.

Companies engaged in the premixed mortar, not only associated with the product, but also process or service. Because the company is engaged in products and services. Marketed products must be balanced with good service in order to synergize with each other. Good product but not parallel with good service, then the result is not maximal and vice versa.

For that, it is necessary to determine the appropriate managerial implications for the company in determining the strategy in achieving the company's sales targets. The managerial implications used are Segmentations, Targeting, Positioning (STP). From the segmentation can be determined based on the consumers who have bought and used the product, the extensive project needs can affect the consumer entry in the criteria of the upper, middle, or lower segment. In terms of targets, consumers with large project needs will always benefit from price and service.

Moreover, always have a target to every consumer in a year, if the consumer reaches the target, then there is a bonus that can be given in accordance with the initial agreement of the contract. In terms of positioning, it should always be able to create a good image for every consumer in order to keep the name and good relationship between both parties. Managerial implications can be arranged based on the following variables.

5. CONCLUSION

Based on the analysis of the effect of the marketing mix and brand image on premixed mortar loyalty, it can be concluded that product, price, process, and brand image significantly affects loyalty. The variable that has the greatest effect is the price, followed by the product, process and brand image.

REFERENCES

- AHMADY, M. (2012). Key success values in relationship marketing of agriculture products. **Journal of Management and Agribusiness**, v. 9, n. 1, p. 59-67.
- ANWAR, A.; GULZAR, A.; SOHAIL, F. B.; AKRAM, S. N. (2011) Impact of brand image, trust, and effect on consumer brand extension attitude: the mediating role of brand loyalty. **International Journal of Economics and Management Sciences**, v. 1, n. 5, p. 73-79.
- ARIF, K.; ABDILLAH, R. (2011) **Smart Book Building a House**. Jakarta (ID). Kanaya Press.
- AROKIASAMY, A. R. A. (2012) The Effect of Marketing Mix and Customer Perception of Brand Loyalty. **IOSR Journal of Business and Management**, v. 4, n.2, p. 01-11.
- ARTHUR, K.M.; ASMARA, A.; SIMANJUNTAK, M. (2019). The Effect Of Marketing Mix On “KPR XTRA Bebas” Decision Making in Bank X Regional I. 2019. **Journal of Consumer Sciences**. v. 4. N. 1. P 1-12. <http://dx.doi.org/10.29244/jcs.4.1.1-12>
- BOOMS, B. H.; BITNER, M. J. (1981) **Marketing Strategies and Organization. Structures for Services Firms, in Marketing of Strategies**. Chicago (US): American Marketing.
- DIPOHUSODO, I. (1996) **Project Management & Construction**. Kanisius. Yogyakarta.
- FERRINAWATI, E.; PANTJA, D. S. (2004) Attempt to Achieve Consumer Loyalty in Perspective of Human Resources. **Journal of Management & Entrepreneurship**, v. 6, n. 6, p. 15-26.
- GHOZALI, I. (2008) **SEM Alternative Method with PLS**. Semarang (ID): Badan Penerbit Universitas Diponegoro.
- GRIFFIN, J. (2005) **Customer Loyalty: Growing and Retaining Customer Loyalty**. Jakarta: Erlangga.
- HARTONO, J. M. (2008) **Guidelines Questionnaire: Developing a Questionnaire, Overcoming Bias and Increasing Response**. Yogyakarta (ID): Andi Offset.
- IVANAUSKIENĖ, N.; VOLUNGĖNAITĖ, J. (2014) Relations between service quality and customer loyalty: an empirical investigation of retail chain stores in emerging markets. **American International Journal of Social Science**, v. 3, n. 2, p. 113-120.
- KOTLER, P. (2011) **Marketing Management**. 14th Edition. Jakarta (ID): PT Indeks Kelompok Gramedia.
- KOTLER, P.; AMSTRONG, G. (2001) **Marketing principles**. 12nd edition. Volume 1. Jakarta: Erlangga.
- KURNIADI, E.; HERUMANTA, B. (2016) Mortar Study with Pumice Substitution. **Proceedings of the National Seminar on Applied Technology SV UGM 2016**. Vocational School of Gadjah Mada University, v. 3, p. 1161-1166.

- LOVELOCK, C.; WRIGHT, L. K. (2007) **Marketing Management Services**. Jakarta (ID): PT. Indeks Kelompok Gramedia, Indonesia.
- MULYONO, T. (2003) **Concrete Technology**. Andi Offset. Yogyakarta.
- NASUKA, M. (2016) **Influence of Ethic Attitude in Marketing Towards Consumer Loyalty of Syariah Bank**. Disertasi. Yogyakarta : Digital Library UIN Sunan Kalijaga, Available : Digilib.uin-suka.ac.id.
- NUSEIR, M.; MADANAT, H. (2015) 4Ps: A Strategy to Secure Customers' Loyalty via Customer Satisfaction. **International Journal of Marketing Studies**, v. 7, n. 4, p. 78-87.
- POURDEHGHAN, A. (2015) The impact of marketing mix elements on brand loyalty: A case study of the mobile phone industry. **Marketing and Branding Research 2: AIMI Journals**, v. 2, n. 1, p. 44-63.
- RAHMAN, F. Y.; YULIATI, L. N.; SIMANJUNTAK, M. (2019). The Influence of Marketing Mix and Word of Mouth Towards Brand Image and Usage of Online Bike Usage. **Indonesian Journal of Business and Entrepreneurship**, v. 5, n. 3, 287-298. DOI: <http://dx.doi.org/10.17358/IJBE.5.3.287>.
- SCHIFFMAN, L. G.; KANUK, L. (2007) **Consumer Behavior**. 9th edition. New Jersey (US): Pearson Education International.
- SELANG, C. A. D. (2013) The marketing mix influences consumer loyalty in Manado's fresh mall shoulder mart. **Journal EMBA**, v. 1, n. 3, p. 71-80
- SIMANJUNTAK, M.; NUR, HR.; SARTONO, B.; SABRI, M.F. (2019) A general structural equation model of the emotions and repurchase intention in modern retail. **Management Science Letters**. v. 10, n. 2020, p. 801–814 <http://dx.doi.org/10.5267/j.msl.2019.10.017>.
- SUBAGYO, A. (2010) **Marketing In Business**. 1st. Jakarta (ID): Mitra Wacana Media.
- SUMARWAN, U. (2014) **Consumer Behavior**. 2nd Edition. Bogor: Ghalia Indonesia.
- SUMARWAN, U. (2015) **Methods of Business and Consumer Research**. Bogor (ID): IPB Press.
- SUMARWAN, U.; DJUNAIDI, A.; AVILIANI, SINGGIH, H. C. R.; SAYONO, J. A.; BUDIDARMO, R. R.; RAMBE, S. (2009) **Strategic marketing**. Jakarta: Inti Prima Promosindo.
- TALBOT, M. (1997) **Partial Least Square Regression**. New York (US): Corp CSI.
- TJAN, S. (2015) The impact of the marketing mix on customer loyalty towards the Plaza Indonesia shopping center. **iBuss Management**, v. 3, n. 2, p. 392-402.
- TJOKRODIMULJO, K. (1996) **Concrete Technology**. Nafigiri. Yogyakarta.
- UTOMO, D. A.; NURMALINA, R. (2011) Analysis Customer Satisfaction and Loyalty Prima Fresh Mart (Service Quality Approach). **Agribusiness Forum**, v. 1, n. 2, p. 132-150.